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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/502,047	07/29/2004	Yasuo Ibuki	P25723	2453
7055 7590 09/06/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER MICHALSKI, SEAN M	
			ART UNIT	PAPER NUMBER
			3724	
			NOTIFICATION DATE	DELIVERY MODE
			09/06/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/502,047

Applicant(s)

IBUKI ET AL.

Examiner

Sean M. Michalski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/30/2007 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20 and 30 recites the limitation "after the driving of the inner blade is resumed" in lines 2 and 3. Resumed after what? There is insufficient antecedent basis for this limitation in the claim. No initial inner blade driving is claimed, nor should it be, since that would be a method step presented in an apparatus claim. It is unclear what applicant believes is the subject matter falling within the scope of this claim.

Claim 25 is rejected under the second paragraph of 35 U.S.C. 112. Claim 25 recites the limitation "to drive the inner blade at a predetermined number of driving revolutions". It is unclear what applicant is claiming. If applicant is claiming that the controller is dictating the raw number of revolutions, then this limitation is correct, if strangely worded; however the use of the word "at" instead of "for" indicates that the

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applicant is attempting to claim revolutions per unit time. This claim is at best ambiguous and should be clarified at least by remarks. The claim has been treated as best understood.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst (5,671,535) in view of Dekker (EP 0 652 087 A1).

Regarding claims 15 and 25,

Van Der Borst et al. discloses An electric razor (figure 1) provided with an inner blade, (figure 2) an outer blade that slidably contacts the inner blade (figure 2), a driving portion that drives the inner blade (23 figure 2), a controller that controls the driving portion (figure 3;) so as to drive the inner blade at a predetermined driving frequency and a predetermined driving amplitude (inherent properties of the razor, see figure 3, and figure 4a-c and 11a-c), or a predetermined number of driving revolutions (if a user selects the number of seconds the razor is to be on, then there is inherently a predetermined number of revolutions).

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a main switch that switches an operation between ON and OFF (figure 1), and a mode switch (207 205 figure 1) that operatively changes a drive mode between a normal drive mode allowing a user to shave hair by nipping the hair between the inner blade and the outer blade (see all figures, additionally cutting hair is an inherent property of any apparatus that is disclosed as a 'shaving apparatus'), and a cleaning drive mode (mode M or C) allowing the user to clean the blades.

It should be made clear that the interpretation that modes M or C each constitute cleaning drive modes is correct, and proper, since a user with the button in mode M or C may clean the razor by blowing on it. Alternatively, the vibrations/rotations of the blades in this mode will serve to clean the blades to some extent. The fact that the shaver *may* be cleaned during use in mode C or M makes it proper to call them each "a cleaning drive mode". The recitation "a cleaning drive mode" does not impart any structure beyond what is disclosed by Van Der Borst.

The standard of claim interpretation during prosecution is as follows: "claims in a pending application should be given their broadest reasonable interpretation" consistent with the specification and prior art. In re Pearson , 181 USPQ 641 (CCPA 1974). See additionally MPEP 904.01, and also In re Morris, 127 F.3d 1048, 44 USPQ2d 1023 (Fed. Cir. 1997). It has been established that during examination, where applicant has the ability to amend claims, the standard of claim interpretation is that the broadest reasonable interpretation be given to all the terms of a claim, *absent a specific definition provided in the specification*, which would then control.

wherein the controller controls the driving portion in the normal drive mode when the mode switch is switched to the normal drive mode, while the controller controls the driving portion in the cleaning drive mode when the mode switch is switched to the cleaning drive mode, (the controller controls all of the modes- see figures 11A-C).

at least one of the driving frequency and the driving amplitude of the inner blade in the cleaning drive mode is set smaller than the corresponding driving frequency or driving amplitude in the normal drive mode (see figures 11A-C which show the output speed UR to vary based on mode, cleaning mode C-M-B has Ur of 5, whereas 'normal mode' P-M-B has Ur of 7; 7 is greater than 5, and since frequency is related to Ur - velocity- the cleaning mode has a lower frequency than the 'normal' mode. See column 8 lines 40-45, which indicates Ur is a measure of velocity)

Van Der Borst et al. discloses every aspect of the invention except the limitation that the speed of the blade is between 20 and 60 meters per minute. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select a range of appropriate speeds for the blades to operate within, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). The motivation to find an appropriate blade speed is that blade speed affects comfort and efficiency. Common sense and Routine experimentation would indicate that a blade

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speed of .00001 m/s would be stupid, as would a blade speed of 1000 m/s (Examiner takes official notice that this is common sense); determining an appropriate range for user comfort and efficiency is a matter of routine design. The selection of 20m/min. and 60m/min. as bounds for the razor speed is not inventive, it lacks criticality, anyone of ordinary skill in the art could have selected the claimed range for any number of reasons.

Alternatively,

Dekker discloses a blade speed for a cutter as between 0.4 and 1.2 m/s which is known to be between 24 and 72 meters per minute: this overlaps the claimed range of between 20 and 60 m/m (see column 3 line 51). Dekker shows that it was known to make razors having a bounded speed range of between 24 and 72 m/min. Where the claimed range overlaps or lies within a prior art reference a prima facie case of obviousness exists. See *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). In the same field of invention it would have been obvious to one skilled in the art at the time of the invention to modify Van Der Borst et al. by limiting the blade speed to between 24 and 72 m/min. as taught by Dekker. The motivation to combine is that this range is determined to "improve the shaving performance" (see Dekker Abstract). Note also that motivation is not required to make a showing obviousness. The Supreme Court in *KSR International Co. v. Teleflex Inc. et al.* No. 04-1350, 550 U.S. _____ (2007), 82 USPQ2d at 1396, foreclosed the argument that a specific teaching suggestion or motivation is required to support a showing of obviousness. See the

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Board decision *Ex parte Smith* –USPQ2d–, slip op at 20, (Bd. Pat. App. & interf. June 25, 2007).

Regarding claim 16 and 26, see figures 11a-c; which clearly indicate that there are multiple cleaning “drive modes” C-M-B and M-M-B are different than each other; each having a different speed (U_r) from the other. They are the multiple cleaning drive modes.

Regarding claim 17 and 27, a user may perform each of the functional recitations of claim 17 with no additional structure. Functional capabilities only limit claim scope inasmuch as the shown structure must be capable of performing the functions as recited. Once the “ON-time” reaches whatever time the user desired (1 minutes, 5 minutes; 1,000 minutes) the user may switch modes from P to M or C. The user does not have to desire to clean the razor to switch to a “cleaning mode” of the razor.

Regarding claim 18 and 28, the driving of the inner blade is suspended after the blade has been driven in the cleaning mode a predetermined time. A user simply selects mode C, waits any amount of time they wish, and then move the main switch to “OFF”.

Regarding claim 19 and 29, a user may perform each of the functional recitations of claim 19 with no additional structure. Functional capabilities only limit claim scope inasmuch as the shown structure must be capable of performing the functions as recited.

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Regarding claim 20 and 30, it appears that applicant is claiming that the blade is slower after it is stopped and resumed. This is accomplished by driving in mode P, stopping, then switching to mode C or M and then *resuming* the "ON-state" of the master switch. Again, functional recitations need only be shown to be capable of being performed with the structure of the prior art.

Regarding claim 21 and 31, a user may select any number of "durations" and any one of an infinite number of combinations of stopping and restarting the inner blade, according to any of its modes.

Regarding claim 22 and 32, a user may perform each of the functional recitations of claim 22 with no additional structure. Functional capabilities only limit claim scope inasmuch as the shown structure must be capable of performing the functions as recited.

Regarding claim 23 and 33, Van der Borst has a notifier that notifies the user when the apparatus is being driven in a cleaning mode. The notifier is the letter C or M affixed, located printed or otherwise visible to a user on the face of the shaver. See figure 1.

5. Claims 24 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Borst in view of Dekker as applied to claims 15-23 and 25-33 above, and further in view of Momose (US 5,920,988).

Van Der Borst in view of Dekker does not teach an indicator that is capable of indicating when the blade has been driven a certain amount and capable of prompting a user to clean the blade.

Such indicators are known. Momose shows a display 62 (figure 2) for displaying "time for cleaning" (s108 figure 5).

It would have been obvious to one of ordinary skill in the art at the time of the invention to add a counter and display to indicate when the blades needed cleaning. The cleaning of blades is necessary and the inconvenience of keeping a mental or external tally of time, revolutions, number of uses or any other parameter by which to determine when the blades need cleaning is obviated by providing a known counter system with display for use in a similar electric shaver and to display when the time for cleaning has been reached.

Response to Arguments

6. Applicant's arguments filed 7/30/2007 have been fully considered but they are not persuasive. The claims are not in condition for allowance, as generally alleged by applicant. Applicant presents no reasons why the pending claims should be considered patentable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean M. Michalski whose telephone number is 571-272-6752. The examiner can normally be reached on M-F 7:30AM - 3:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMM



KENNETH E. PETERSON
PRIMARY EXAMINER